

**AC LSSD/LBIST TEST COVERAGE ENHANCEMENT****ABSTRACT**

In an LSSD/LBIST scan design, AC scan test coverage is enhanced with a scan chain configuration capable of selectively inverting scan-in signals. For example, one or more XOR gates are inserted in the scan chain. The XOR gates is controlled by a control signal preferably coming from a primary input such that original scan-in signals as well as inverted scan-in signals are shifted into the scan chain. The proposed configuration significantly enhances the AC test coverage for a scan chain having adjacent SRLs feeding the same cone of logic by adding a simple logic circuit such as an XOR gate between the adjacent SRLs.